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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	
	)	
HUGH G. CHILTON, <u>et al.</u>	)	
	)	
Serial No.: 08/855,387	)	Examiner: P. Hruskoci
	)	
Filed: May 13, 1997	)	Group Art Unit: 1724
	)	
For: DEPTH MEDIA IN-TANK	)	Attorney Docket: 3747-021
FUEL FILTER WITH	)	
EXTRUDED MESH SHELL	)	

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AFFIDAVIT UNDER 37 C.F.R. 1.131

We, Hugh G. Chilton and William L. Zehnpfennig, being  
duly sworn, depose and say that:

1. We are the applicants in the above-referenced patent  
application Serial No. 08/855,387 and we are each completely  
familiar with the contents of such application.

2. During the time we made the invention described in  
the subject application and at the time we executed said  
application Serial No. 08/855,387, we were both employed by

Kuss Corporation, the assignee of the above-referenced application.

3. We conceived the invention described and claimed in the above-referenced application, Serial No. 08/855,387 in this country prior to October 25, 1996, the filing date of United States Patent No. 5,716,522 and that following conception, the invention was thereafter reduced to practice prior to October 26, 1996 or reduced to practice with due diligence from prior to this date to a subsequent reduction to practice or the filing of the above-referenced application, Serial No. 08/855,387 on May 13, 1997.

4. As proof of these facts, there are annexed hereto as Exhibits A and B, copies of a letter and a disclosure document:

Exhibit A	A letter to Kuss Corporation's patent attorney providing a sample of the exterior layer of the invention
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Exhibit B	A dated Invention Disclosure
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5. With the exception of the masked-out portions containing dates, the attached copies of the aforementioned

letter and Invention Disclosure are known to us to be true copies thereof.

6. Exhibit A, dated prior to October 25, 1996, is a copy of a letter from me, Hugh G. Chilton to David Murray, the patent attorney for the assignee, Kuss Corporation. The letter describes aspects of the extruded outer layer and presents construction details of the composite filter of the present invention. A sample of the extruded mesh utilized for the outer layer of the invention accompanied this letter.

7. Exhibit B, also dated prior to October 25, 1996, is an Invention Disclosure prepared in the normal course of business on behalf of the assignee, Kuss Corporation. The Disclosure details the specific features, such as the extruded outer nylon shell or screen, as well as the benefits of this new filter configuration.

8. The attached Exhibits A and B and our statements prove that the invention claimed in patent application Serial No. 08/855,387 was conceived and reduced to practice in the United States prior to October 25, 1996 or conceived prior to October 25, 1996 and reduced to practice subsequent to such

date with due diligence commencing prior to such date. Our personal recollections of such events, refreshed by these documents, confirms such conception, diligence and reduction to practice.

9. Further deponents saith not.

STATE OF OHIO                    )  
                                      ) SS  
COUNTY OF HANCOCK            )

*Hugh G. Chilton*  
Hugh G. Chilton

Subscribed and sworn to before me, this 17<sup>th</sup> day of December, 1998.

*Robin R. Bates*  
Notary Public

seal

**ROBIN R. BATES**  
Notary Public, State of Ohio  
My Commission Expires 3-17-99

STATE OF INDIANA                )  
                                      ) SS  
COUNTY OF BARTHOLOMEW        )

William L. Zehnpfennig

Subscribed and sworn to before me, this \_\_\_\_\_ day of \_\_\_\_\_, 1998.

\_\_\_\_\_  
Notary Public

seal

date with due diligence commencing prior to such date. Our personal recollections of such events, refreshed by these documents, confirms such conception, diligence and reduction to practice.

9. Further deponents saith not.

STATE OF OHIO                    )  
                                      ) SS  
COUNTY OF HANCOCK            )

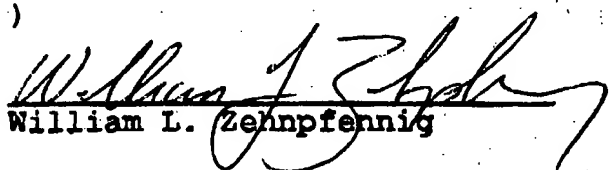
\_\_\_\_\_  
Hugh G. Chilton

Subscribed and sworn to before me, this \_\_\_\_\_ day of \_\_\_\_\_, 1998.

\_\_\_\_\_  
Notary Public

seal

STATE OF INDIANA                )  
                                      ) SS  
COUNTY OF BARTHOLOMEW        )

  
\_\_\_\_\_  
William L. Zehnpeffnig

Subscribed and sworn to before me, this 18 day of Dec., 1998.

  
\_\_\_\_\_  
Notary Public

seal



M. JANE HOLLEY  
Resident of Bartholomew Co.  
My Commission Expires 10-11-01



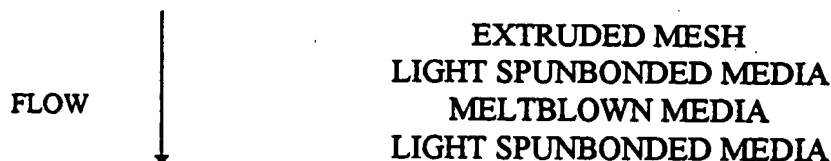
Mr. Dave Murray  
Brinks, Hofer, Gilson & Lione  
1130 Edison Plaza  
Toledo, OH 43604-1537

Dear Dave:

Enclosed is a sample of the non-woven extruded mesh material that we are currently evaluating as an exterior layer for the non-woven intank filters. This material, while it looks like a cloth, is actually extruded from rotating dies to give it a cloth like appearance.

The openings on this extruded mesh material are roughly 900 microns by 500 microns. As such, it changes the properties of the media in that this outer layer does not function as a significant filter. It does, however, lower the pressure drop of the filter significantly.

The construction of a filter of this type would be as shown below. Note that we would still probably use a spun bonded layer between the extruded mesh material and the meltblown. This would be a very thin layer to prevent the meltblown from "pilling" like a sweater through the very open outer layer. We currently use this thin layer of spun bonded material when we use a woven outer layer.

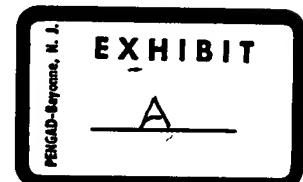


I will be out of town for the remainder of this week and out of the country next week. I will try to give you a call but things will be a bit hectic. If I do not reach you, I will call you the following week.

Thanks for your help on this.

Sincerely,

*Hugh Chilton*  
Hugh Chilton  
President



# Invention Disclosure Form

Title: Heavy Duty 31 micron depth media

Inventors: Bill Zehnpfennig  
Hugh Chilton  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone: 419 425-7623  
Phone: 419 425-7230  
Phone: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Phone: \_\_\_\_\_

## Introduction (What problem is being addressed):

The durability of the 31 micron depth media in severe temperature/vibration in-tank fuel applications, and over-all cost reduction. The heavy-duty media utilizes an extruded nylon screen in place of the current 130 micron woven cloth.

## How the invention solves the problem:

The new extruded screen is has a thicker cross section, and heavier weight than the current woven cloth. This will provide better protection against tears, rips, wear, and other forms of damage encountered from processing and usage.

## Prior Technology most like the disclosure:

The current 31 micron nylon depth media.

## Commercial / Strategic Considerations:

The new media be better suited in all in-tank fuel filter applications resulting from increased durability, and also contribute to a over cost reduction in material cost.

## Deadlines

Publication Date:  
Production Date:

Working model date:  
Disclosure to others date:

## Where / To Whom:

Inventors:

*Bill Zehnpfennig*  
*Hugh Chilton*  
\_\_\_\_\_  
\_\_\_\_\_

Witnesses:

*Arthur W. Faulstich*  
*J. H. F. F. F. F.*  
\_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_  
Date: \_\_\_\_\_  
Date: \_\_\_\_\_  
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